SOUTHERN REGIONAL RESEARCH CENTER

On the Bayou



Editor-in-Chief Dawn Reed

Associate Editors Trinia Bax Suhad Wojkowski

Committee Members Mary Lovisa Terri Von Hoven Kelley Williams



Events & 2
Observances

Events & 4
Observances
cont..

Recognition 6

Safety Corner 8

Did You Know?

SRRC 12 Publications



JULY 2018

Message from the Director

Dr. Deepak Bhatnagar

Dr. Jordan... my reflections

"Four score and seven years ago...." That is how Dr. Jordan would start his speeches, and then in his booming voice quickly say, "Oh sorry, wrong speech!"

Dr. Jordan was a remarkable man with many varied experiences in just one lifetime. His enthusiasm, knowledge and savvy were unmatched; he challenged us all to do our jobs better.

Dr. Jordan was a good and kind man, and as Director of SRRC, always had the best interest of the Center at heart. From bringing in significant new funding to recovery from Hurricane Katrina, his enthusiasm was second to none. He always did everything with a passion, and had a can do attitude. Even after his retirement, he continued to be a great friend to SRRC.

His deep interest in developing and promoting US Agriculture was a calling for him. His passion can be seen throughout his career as a scientist in biochemistry to Director of the Agricultural Experiment Station, Colorado State University followed by his move to Washington DC as Administrator of the USDA's Cooperative Research program, and finally, as Director of the USDA/ARS/ SRRC. Even after his retirement, he motivated several of us to join him in promoting Louisiana agriculture through the Agribusiness Council of Louisiana, and building a new age of leaders to champion agriculture in the 21st Century.

His absence will be dearly missed by me personally. He is a great loss to the city of New Orleans, and the US Agriculture enterprise has lost its most ardent and passionate advocate.

In Memory of Dr. John Patrick Jordan



It is with great sadness that I report the passing this week of an extraordinary man and scientist who served agriculture, academia, and the U.S. Department of Agriculture (USDA) with great distinction throughout his career – Dr. John Patrick Jordan of New Orleans, Louisiana.

Dr. Jordan, who turned 84 in April, passed away Saturday from complications of a recent stroke.

Despite his numerous scientific achievements, Dr. Jordan might best be remembered by the USDA family as having been Administrator of the USDA Cooperative State Research, Education, and Extension Service from 1983 to 1994, and as Director of the Agricultural Research Service Southern Regional Research Center in New Orleans for 14 years until his retirement in 2008.

Born into an Army family, Dr. Jordan served as a ranger and paratrooper with the 101st Airborne Division as a young man. He received both his bachelor's degree in Animal Science and his Ph.D. in Comparative Biochemistry at the University of California, Davis, before joining Oklahoma City University as an assistant professor.

Dr. Jordan went on to hold various research and teaching positions with Oklahoma City University and Colorado State University, where he eventually served as Associate Dean for the College of Natural Resources and as Director of the university's Agricultural Experiment Station. His research at the universities focused on space medicine, in which he conducted bioenergetics studies, funded by the National Aeronautics and Space Administration, for the Mercury, Gemini, and Apollo space programs.

He was the author of more than 100 journal papers and several books, and he served for 25 years as the author for the agriculture entry in the Encyclopedia Britannica's annual Yearbook of Science and the Future. He was a Fellow of the American Association for the Advancement of Science and the American Institute of Chemists, and past president and former board member of the American Institute of Biological Sciences.

Dr. Jordan received numerous awards and citations during his Federal career, most notably the USDA Distinguished Service award in 1986 and the U.S. Presidential Rank Award in 1988 and in 2002.

His lasting legacy to USDA was his leadership during the extensive reconstruction of the Southern Regional Research Center following the devastation wrought by Hurricane Katrina in 2005. He oversaw the relocation of more than 170 employees to 22 temporary work locations, and the extensive mold remediation of the Center's laboratories and work spaces. With his can-do attitude and the hard work of the Center's staff, the Center was made operational again in 2006, a full year ahead of schedule.

A tribute to Dr. Jordan's life is posted at: www.schoenfh.com/tributes/John-Jordan

Our sincere condolences go out to Dr. Jordan's family and his many friends on his passing.

Acting Deputy Under Secretary, REE Acting Chief Scientist, USDA

Charmaa (Jacobn-Upr

Events and Observances

Caribbean American Heritage Month 2018

Submitted by: Michael Watson

June is designated as National Caribbean-American Heritage Month. During this month we honor America's long shared history with our neighbors in the Caribbean and celebrate Caribbean American enrichment of our nation.

The CAHM Committee at SRRC hosted two events to celebrate the significant contributions of Caribbean Americans. Our first event was our annual "Taste of the Caribbean" where participants were exposed to the exotic flavors of Caribbean coffee, and treated to a variety of desserts.

On June 21st, the second CAHM event was held with our Caribbean American Heritage Luncheon. At this event authentic Caribbean food was enjoyed along with music from Caribbean nations. The cultural beauty of the Dominican Republic was highlighted. To fully appreciate Caribbean music, one must understand the culture of its people. Caribbean music is very diverse; each genre is a syntheses of African, European, Indian and Indigenous influences. It is a style of music largely created by descendants of African slaves. Caribbean music is also related to Central and South American music.

Participants at this event were exposed to the musical genius of internationally acclaimed songwriter and musician Jose Fermin Ceballos (affiliated with the New Orleans Center for the Gulf South). Additional music genres were also provided by Kenwy Stiven Rijo. He is a contemporary Afro Caribbean rap artist hailing from the Dominican Republic.











Events and Observances (cont.)

EBC Fish Fry

The EBC (Employee Benefits Club) is an organization that promotes interaction to increase morale among everyone working at SRRC. The Club encourages and organizes participation by SRRC staff in charitable, social, and educational activities. As part of its membership drive, the EBC hosted a fish fry on June 15th.





SRRC Visitors

35 Bayou Summer Program students visited the Center on Friday June 15th. SRRC has hosted BAYOU students in past years and the program is becoming a regular part of the Center's outreach efforts.

The BAYOU, Beginning Agricultural Youth Opportunities Unlimited, Summer Program is sponsored by the Agricultural & Mechanical College of Southern University, Baton Rouge, La. The BAYOU program provides an opportunity for high school seniors to gain "first hand" knowledge about career opportunities in Agriculture, Family and Consumer Sciences and related disciplines.

The students were welcomed by the Center Director, Dr. Deepak Bhatnagar, who gave an overview of USDA and the mission of Agricultural Research Service, followed by SRRC research efforts and their impact. Dr. Bhatnagar also discussed the many scientific expertise and disciplines that make up agricultural research. A tour of the Center research facilities was provided to the group. The students seemed very engaged, and asked many pertinent questions.



Events and Observances (cont.)

Community Outreach Project: Blessing Bags for Homeless Shelters

Submitted by: Trinia Bax

The Community Outreach Event "Blessing Bags for Homeless Shelters" drive concluded on Friday, June 8, 2018. Twenty-two large boxes of blessing bag supplies were collected from all federal agencies and stored and sorted at SRRC. Center employees contributed generously to this program. The designated agencies: Chez Hope, Eden House and Ozanam Inn picked up the donated items last week. Special thanks to Bruce Potter, Dawn Reed and Veronica Washington who assisted in getting items from the storeroom for the agencies. Thanks to all for your generous donations.



LGBTA Observance & Lunch

Submitted by: Geromy Moore

LGBTA @ SRRC presents its observance & lunch on Friday July 13th at 11:30 in the Main Conference Room.



Cultural Diversity Day 2018

Submitted by: Elena Graves

Cultural Diversity Day 2018 will be held on Monday, August 27th at noon in the Main Conference Room. Anyone who wishes to participate as a cook should contact Elena Graves at ext 512 or Jeannine Moraitis, ext 525. Please let us know what country or region you wish to represent.



Reminder—

Do mark your calendars, we will have an ALL Staff Meeting on Wednesday, July 18th at 10 am in the Bayou (Main) Conference Room. This will be an information session, and an opportunity for staff to ask questions or seek clarification.

PAGE 6

Scientific Recognition

ARS Research Chemist **Dr. H. N. Cheng** of the Commodity Utilization Research Unit has been elected to be a Fellow of ACS Division of Agricultural and Food Chemistry (AGFD). Since 1988, AGFD has awarded the Fellow designation to selected individuals every year in recognition of outstanding scientific contributions to the field of agricultural and food chemistry. The award recognizes the application of chemistry to improve the supply, safety, and/or quality of food and agricultural products. A significant portion of the research should have been reported in ACS



journals and books and/or at Divisional symposia. About three Fellows are elected in a given year. The award will be presented to Dr. Cheng during the ACS National Meeting in Boston, MA. August 19 - 23, 2018.

ARS Research Plant Physiologist **Dr. Heping Cao** of the Commodity Utilization Research Unit has been invited to serve as an Editorial Board Member for Scientific Reports, a Nature Research journal. Scientific Reports is the largest scientific journal in the world. Editorial Board Members are recruited for an initial 2 year term, and the principal responsibilities are to manage the peer review of manuscripts and make editorial decisions that comply with the editorial criteria of the journal.



Dr. Gillian Eggleston Receives Her 'Book of Publications'



Dr. Gillian Eggleston, who left SRRC to become Director of LSU AgCenter Audubon Sugar Institute in St. Gabriel, La., returned to SRRC for a visit and was presented with two volumes of the book of her publications.

Scientific Meetings

Scientific Presentations

ARS Research Microbiologist **Dr. Geromy Moore** and Research Molecular Biologist **Dr. Perng-Kuang Chang** of the Food and Feed Safety Research will attend the 11th International Mycological Congress to be held in San Juan, Puerto Rico from July 16-21, 2018. Dr. Moore will present a poster entitled "A genomic-level recombination study of familial *A spergillus flavus*" and Dr. Chang will present a poster entitled "A spergillus flavus ecm33, a GPI-anchored protein -encoding gene, plays a role in vegetative growth, production of conidia and sclerotia, and resistance to calcofluor white".

ARS Research Plant Physiologist **Dr. John C. Beaulieu** of the Food Processing and Sensory Quality Research Unit will attend the American Society for Horticultural Science (ASHS) Annual Meeting to be held in Washington DC from July 31-August 3, 2018. Along with ARS Supervisory Research Horticulturist, **Dr. Elizabeth Baldwi**n, from the US Horticultural Research Laboratory, Fort Pierce, FL, Dr. Beaulieu will moderate a Workshop titled "How Agricultural Research Gets Done in the US Federal Government: From Congress and Budgets to University and Industry Partnership". Dr. Beaulieu will also present a talk entitled "GC-O, Volatile and Qualitative Differences in Locally Grown Rabbiteye and Southern Highbush Blueberries, and Juices". Featured speakers at the event will be **Dr. Chavonda Jacobs-Young** (Acting REE Deputy Undersecretary & USDA Chief Scientist), **Dr. Simon Liu** (USDA Associate Administrator), **Dr. Gene Lester** (NPL), and **Mojdeh Bahar**, JD (OTT, Assistant Administrator).

Submitted by: Terri Von Hoven

July 14-18 American Society of Plant Biologists, Montreal, Canada

July 14-19 International Carbohydrate Symposium, Lisbon, Portugal

July 15-18 Institute of Food Technologists IFT18, Chicago, Illinois

July 16-21 Mycological Society of America, San Juan, Puerto Rico

July 29–Aug 3 11th International Congress of Plant Pathology, Boston, Mass.

Water Fountain Usage at SRRC

By installing special water dispensing fountains all across the facility, we helped eliminate waste from disposable plastic bottles. Following is the tally from the four water fountains:

1st Floor—8338 bottles saved 2nd Floor—10535 bottles saved 3rd Floor—10639 bottles saved Textile Bldg.—557 bottles saved



Please note: When the water fountain filter is changed, the numbering restarts.

Recycle dates this month will be July 12 and 26.

Safety Corner

SEA Environmental Management Programs rated #1 in the Agency

Submitted by: Casey Grimm, EMS Coordinator

The environmental management system (EMS) was a program developed out of the Energy Policy Act of 2005. Although different Presidents have shaped the program through the use of executive orders, the overall goal remains: to minimize the impact of operations on the environment. This includes reducing fossil fuel usage, water usage, and recycling.

Four annual goals are set by SRRC and approved by the Area office, including one research goal. Additional goals have been added by headquarters. Goals not accomplished in the EMS year (Jul 1 – Jun 30) are carried over and remain in place until they are completed. The current goals and last year's goals are contained in an EMS program that is updated annually and can be found under the Safety portion of the SRRC intranet. (http://nola.srrc.usda.gov:8000/srrcmenf.htm)

The program at SRRC is reviewed annually by the Area Safety Officer and every three years by a second party audit. Two reports are generated each year. The EMS Fall report consists of a spreadsheet with the cost and usage of electricity, fuel, natural gas and water, while a separate Spring report is used to survey the administration of the program. The survey includes question such as: Is there an active EMS program, Are goals being set, Are the goals being communicated to SRRC personnel, and is the administration taking an active role in the program? The recent notice, congratulating SEA for achieving a 100% compliance level is in regards to the Spring report. Along with the rest of the Area, SRRC achieved 100% compliance with our EMS program.



Safety Corner (cont.)

SERT Training

Submitted by: David Ambrogio

The Secondary Emergency Response Team (SERT) completed first aid recertification requirements on June 20 and 21 here at SRRC. David Ambrogio taught the 2 day class, which included first aid, CPR, and use of an AED, Automated External Defibrillator. Topics included shock, bleeding, severe allergic reaction, and assessment of both conscious and unconscious patients among many others.

The following attended the training: Jeanne Lea, Mary Lovisa, Geromy Moore, Kanniah Rajasekaran, Shawndrika Reed, Kandan Sethumadhavan, Jay Shockey, Sophie Uchimiya, and Kelley Williams. Congratulations on your recertification and thank you all for your service!

All of us feel safer now knowing that we have well trained personnel on our staff as first responders.





Safety Corner (cont.)

Preparing for a Hurricane or Tropical Storm

Submitted by: Shelia Parker

You can't stop a tropical storm or hurricane, but you can take steps now to protect yourself and your family.

If you live in coastal areas at risk, the Centers for Disease Control and Prevention (CDC) encourages you to begin preparing yourself for hurricane season. The Atlantic hurricane season is **June 1 through November 30** each year.

Please follow these important hurricane preparedness tips from CDC:

- •Preparing for a Hurricane: Take basic steps now to ensure your safety should a storm hit.
- •Emergency Supplies You Will Need: Stock your home and your car with supplies.
- •Make a Plan: Create a family disaster plan.
- •Prepare to Evacuate: Never ignore an evacuation order.
- •Protecting Older Adults: Understand older adult health and medical concerns.
- •Protecting Pets: Ensure your pet's safety before, during, and after an emergency.
- •Prevent carbon monoxide (CO) poisoning after the storm: Place generators outside at least 20 feet from any door, window, or vent.

Evacuation Plans:

You may not need to travel hundreds of miles. If possible, identify someone, perhaps a friend or relative who doesn't live in a zone or unsafe home, and work it out with them to use their home as your evacuation destination.

Be sure to account for your pets, as most local shelters do not permit them. Put the plan in writing for you and those you care about.

For more information, see the following links: https://www.weather.gov/wrn/2017-hurricane-evacuation

•After a hurricane: Take these precautions when the storm is done: https://blogs.cdc.gov/yourhealthyourenvironment/2016/08/31/preparing-for-a-hurricane-or-tropical-storm/

What to Do Before the Tropical Storm or Hurricane: http://www.nws.noaa.gov/os/hurricane/plan.shtml

Did You Know?

Did You Know?... The Fourth of July

The Fourth of July – also known as Independence Day – has been a federal holiday in the United States since 1941, but the tradition of Independence Day celebrations goes back to the 18th century and the American Revolution. On July 2nd, 1776, the Continental Congress voted in favor of independence, and two days later delegates from the 13 colonies adopted the Declaration of Independence, a historic document drafted by Thomas Jefferson. From 1776 to the present day, July 4th has been celebrated as the birth of American independence, with festivities ranging from fireworks, parades and concerts to more casual family gatherings and barbecues.

An interesting fact associated with the 4th of July is:

U.S. Presidents John Adams and Thomas Jefferson both died on July 4, 1826—the 50th anniversary of the adoption of the Declaration of Independence.

For more information, see: https://www.history.com/topics/holidays/july-4th

Human Resource Corner

Welcome to Our New Employees

Submitted by: Janell Becker and Suzanne Martin

Please welcome our new student employees:

McKenna Hurlburt, Biological Science Aid, is working in FPSQ with Dr. Peter Bechtel. McKenna is an honor student at Riverdale High School and will be a junior in the fall.

Kennedi Franklin, Biological Science Aid, is working in FPSQ with Dr. Peter Bechtel. Kennedi attends Warren Easton Charter High School, is an honor student, and will be a junior in the fall.

New Visiting Scientist:

Please welcome **Maojun Wang** to SRRC. Dr. Wang is a visiting research scholar coming from the Huazhong Agricultural University, Wuhan, China, on the "The National Postdoctoral Talent Support Program". He will be working in CFB on the "Molecular characterization and phenotypic assessments of cotton fiber quality traits" project with Dr. David Fang. He will be at SRRC for a year.

Recent SRRC Publications

Submitted by: Suhad Wojkowski

Full text pdfs of SRRC publications are available in the Eprints database via "Library" link on the SRRC Intranet page: http://nola.srrc.usda.gov:8000/srrcmenf.htm

Click on the article's title below to launch the pdf from Eprints.

Biswas, Atanu, Liu, Zengshe, Furtado, Roselayne, Alves, Carlucio R. and Cheng, H.N. (2017) *Novel Polymeric Products Derived from Biodiesel*. In: Stereochemistry and Global Connectivity: The Legacy of Ernest L. Eliel. Volume 2. ACS Symposium Series. American Chemical Society, Washington, DC. pp. 207-220.

Cao, Heping and Sethumadhavan, Kandan (2018) <u>Cottonseed Extracts and Gossypol Regulate</u> <u>Diacylglycerol Acyltransferase Gene Expression in Mouse Macrophages.</u> Journal of Agricultural and Food Chemistry, 66. pp. 6022-6030.

Cheng, H.N., Maryanoff, Cynthia A., Miller, Bradley D. and Schmidt, Diane Grob (2017) <u>Stereochemistry and Global Connectivity: An Overview.</u> In: Stereochemistry and Global Connectivity: The Legacy of Ernest L. Eliel Volume 1. ACS Symposium Series. vol. 1257. American Chemical Society, Washington, DC. pp. 1-10.

Edwards, J. Vincent, Fontenot, Krystal R., Liebner, Falk, Pircher, Nicole Doyle, French, Alfred D. and Condon, Brian (2018) <u>Structure/Function Analysis of Cotton-Based Peptide-Cellulose Conjugates:</u> <u>Spatiotemporal/Kinetic Assessment of Protease Aerogels Compared to Nanocrystalline and Paper Cellulose</u>. International Journal of Molecular Sciences, 19 (840). pp. 1-16.

He, Zhongqi, Zhang, Dunhua and Cao, Heping (2018) <u>Protein Profiling of Water and Alkali Soluble Cottonseed Protein Isolates.</u> Scientific Reports, 8 (9306). pp. 1-9.

Holt, Greg and Dowd, Michael K. (2018) *Cottonseed and Cotton Plant Biomass.* ICAC Recorder, 36 (2). pp. 3-5.

Huang, Youming, Zeng, Xiaochun and Cao, Heping (2018) *Hormonal Regulation of Floret Closure of Rice* (Oryza sativa). PLoS One, 13 (e0198828). pp. 1-16.

Nelson, Donna J. and Cheng, H.N. (2017) <u>Diversity in Science: An Overview.</u> In: Diversity in the Scientific Community Volume 1: Quantifying Diversity and Formulating Success. ACS Symposium Series; vol. 1255. American Chemical Society, Washington, DC. pp. 1-12.